

## **Hybrid Organic-Inorganic Composition for Solid Freeform Fabrication**

### **ABSTRACT**

A method for solid free-form fabrication of a three-dimensional object includes depositing a particulate blend in a defined region, the particulate blend including reactive glass ionomer particulates, cross-linkable polyacid particulates including polyvinyl pyrrolidone-co-polyacrylic acid, and nanocomposites, ink-jetting an aqueous phase binder onto a predetermined area of the particulate blend to form hydrated cement in the predetermined area, and hardening the hydrated cement.